05-25-07

From-Howard & Howard

Atty. Docket No. 060126.00226

REMARKS

In response to the Patent Office Action mailed February 13, 2007, claims 1 and 2 have MAY 2 5 2007 been amended and claim 4 has been cancelled as discussed below. The Applicant respectfully requests reconsideration of the rejection of the claims in view of the amendments to claims 1 and 2 and the remarks which follow.

Claims 1 to 4 and 6 to 7 were rejected by the Examiner as anticipated by U.S. Patent No. 4,022,423 of O'Connor, et al. under 35 U.S.C. § 102(b). First, the Applicant respectfully traverses this rejection on the basis that the claims as originally filed were not anticipated by the disclosure of the O'Connor, et al. patent. However, the claims have now been amended to more specifically define over the O'Connor, et al. patent as discussed further below. This invention relates to a "gas turbine motor for use as a drive for a bell-shaped plate of a rotary atomizer" (Preamble, claim 1) which "enables a higher driving efficiency than for comparable known radial turbines" ([00004]) and which "can provide, above all, a higher RPM than before." thereby providing a "higher overflow rate of the coating material at the bell-shaped plate driven by the turbine." ([00008]). The gas turbine motor of this invention includes a drive shaft having a bearing unit, a turbine wheel drivably mounted upon the drive shaft rotatably disposed within the drive channel of the housing having a plurality of blade elements secured to and extending from a carrier surface, a gas inlet aligned with the blade elements receiving a driving gas under pressure through the housing into driving contact with the blade elements of the turbine wheel and a shielding element (12) fixed to the free ends of the blade elements opposed to the carrier surface (4) thereby limiting the drive channel. In a preferred embodiment, the turbine wheel is formed of two disc elements comprising the carrier surface and the shielding element lying in an opposed relationship in an axial direction and being limited by the drive channel. These elements of the gas turbine motor of this invention are specifically recited in claims 1 and 2 as discussed further below.

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The O'Connor, et al. patent discloses a "Control Valve" and is completely unrelated art. The control valve 10 disclosed in the O'Connor, et al. patent includes an inlet 12 having a scroll-shaped portion 16 and an outlet 13 and a rotor assembly 17 including a plurality of curved vanes 19 which rotate with the shaft 21 to control the pressure drop for a given flow rate, wherein the rotor assembly 17 is raised or lowered by the movement of the stem 34. The liquid flow continues through the rotor assembly 17 over the annular ring 20 and passes out of the control valve through the outlet 13. (Col. 3, lines 38 to 47). However, to accomplish this centrifugal flow, "the axis of the orifice 15 is offset from the axis of the inlet 12." (Col. 2, lines 13 to 17). The Applicant respectfully submits that a person of ordinary skill in the art would understand that the control valve disclosed in the O'Connor, et al. patent would be suitable only for liquid flow and the control valve disclosed in the O'Connor, et al. patent is unrelated art to a gas turbine motor, particularly a gas turbine motor for use as a drive for a bell-shaped plate of a rotary atomizer. Further, the control valve disclosed in the O'Connor, et al. patent does not include a turbine wheel having a plurality of blade elements "secured to and extending from a carrier surface," a gas inlet "aligned with (the) blade elements receiving a driving gas under pressure through (the) housing into driving contact with the blade elements" or a shielding element "fixed to the free ends of said blade elements opposed to said carrier surface thereby limiting said drive channel" as specifically recited in claim 1 as amended.

Further, claim 2 has been amended to specifically recite that the turbine wheel is "formed by two disc elements comprising said carrier surface and said shielding element lying in an opposed relationship in an axial direction and being limited by said drive channel." Although the Applicant respectfully submits that the *O'Connor*, et al. patent did not anticipate claim 2 as originally presented, claim 2 has been amended to more clearly define over the *O'Connor*, et al. patent.

Claims 8 and 9 were rejected as unpatentable over the control valve disclosed in the O'Connor, et al. patent in view of the teaching of U.S. Patent No. 4,355,949 of Bailey. The

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Bailey patent discloses a "control system and nozzle for impulse turbines." As set forth in the Background Art (col. 1, lines 11 to 31), impulse turbines may "be effectively employed to drive power generators, particularly in regions where natural supplies of flowing water exists"; however, "if it is desired to operate the turbines at a constant desired constant speed as required for the production of AC current, the governing system becomes quite expensive." Thus, the control system for impulse turbines disclosed in the Bailey patent includes "a diverter operative in response to a very low control force (which) diverts a jet of power fluid away from a turbine wheel to control an overspeed condition" and to "provide a novel fluid directing nozzle having a jet forming neck portion and diverting section." (Col. 1, lines 54 to 61). First, the Applicant respectfully submits that the control system and nozzle for impulse turbines disclosed in the Bailey patent is unrelated art and it certainly would not be obvious to combine the teaching of the Bailey patent with the control valve disclosed in the O'Connor, et al. patent. There is certainly no "teaching, suggestion or motivation" to combine the references and the Examiner has not identified a reason that would have prompted a person of ordinary skill in the art to combine the prior art elements in the manner claimed as required by the recent U.S. Supreme Court decision of KSR International Co. v. Telefax, No. 04-1350 (U.S. April 30, 2007). In fact, it would be contrary to the teaching of both references to combine the references and there is no disclosure or suggestion that the combination would result in the gas turbine motor for use as a drive for a bell-shaped plate of a rotary atomizer as set forth in the claims of this application.

The Applicant therefore respectfully requests reconsideration of the rejection of the claims, particularly in view of the amendments to claims 1 and 2 and the arguments above.

The Commissioner is authorized to charge our Deposit in the amount of \$120.00 as required for the filing of this Amendment. Also, if there are any additional fees due, the

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Commissioner is authorized to charge our Deposit Account for those additional fees or credit the account for any overpayments regarding this Amendment.

Respectfully submitted,

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Dated: May 25, 2007

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that the attached Amendment is being facsimile transmitted to the Commissioner for Patents and Trademarks, Alexandria, Virginia, to the attention of Examiner Devin J. Hanan from Group: 3745 to facsimile number (571) 273-8300 on May 25, 2007.